

# **CURRENT SENSE APPARATUS AND METHOD**

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## **ABSTRACT OF THE DISCLOSURE**

A current sense apparatus and method comprises a common drain DMOSFET and a MOSFET connected in series between a high voltage and a low voltage to serve as an output stage. The DMOSFET produces a phase output current, a mirror current mirrored from the phase output current, and a sense voltage. A servo amplifier is connected with the mirror current and sense voltage to produce a current sense signal. Due to the mirror current from the DMOSFET proportional to the phase output current, the current sense apparatus senses the phase output current in a temperature independent manner.